Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for shunting cerebrospinal fluids from a brain ventricle to the sinus system of an individual, said system comprising:

i) a shunt body allowing fluid communication between a brain ventricle and a part of the sinus system of the individual,

wherein said shunt body comprises a flow restricting component capable of maintaining a passive and essentially constant resistance to flow of cerebrospinal fluids through the shunt body,

ii) a brain ventricle catheter connected to the shunt body at a first location thereof,

wherein the brain ventricle catheter is capable of draining cerebrospinal fluids from a brain ventricle to the shunt body, and

iii) a sinus catheter connected to the shunt body at a second location thereof,

wherein the sinus catheter is capable of draining, to the sinus system of the individual, cerebrospinal fluids having been drained from the brain ventricle and passed through the flow restricting component of the shunt body to the sinus catheter,

wherein i) the internal or external surface of the shunt body, or ii) the internal or external surface of the brain ventricle catheter, or iii) the internal or external surface of the sinus catheter, comprises a biocompatible and/or hemocompatible material comprising an inert surface preventing biological material from maintaining longer lasting contact with the inert surface, wherein said hemocompatible material is ~~optionally~~ coated with a plurality of charged species capable of increasing the hemocompatibility of the surface.

2. (Original) The shunt system for shunting cerebrospinal fluids according to claim 1, wherein the flow restricting component is capable of maintaining a resistance to flow of cerebrospinal fluids of a constant value of from 0.1 to less than 8 mm Hg/ml/min.

Claims 3-4 (Cancelled).

5. (Original) The shunt system for shunting cerebrospinal fluids according to claim 1, wherein the flow restricting component is capable of maintaining a passive resistance to flow of cerebrospinal fluids of a constant value of from 2 to less than 8 mm Hg/ml/min.

Claim 6-19 (Cancelled).

20. (Original) The shunt system for shunting cerebrospinal fluids according to claim 1, wherein the flow

restricting component is capable of maintaining a passive resistance to flow of cerebrospinal fluids of a constant value of from 2 to 7 mm Hg/ml/min.

Claims 21-23 (Cancelled).

24. (Original) The shunt system for shunting cerebrospinal fluids according to claim 1, wherein the flow restricting component is capable of maintaining a passive resistance to flow of cerebrospinal fluids of a constant value of from 4 to less than 8 mm Hg/ml/min.

Claim 25 (Cancelled).

26 (Previously Presented) The shunt system according to claim 1 wherein the flow restricting component is selected from the group consisting of a tubular structure, a plurality of tubular structures, a porous mass, a fibrous mass, a structure being restricted by co-extending fibres arranged therein, and a structure being restricted by co-extending rods arranged therein.

27 (Previously Presented) The shunt system according to claim 1 wherein the flow restricting component comprises at least one tubular structure having an internal radius of more than 0.05 mm and less than 0.50 mm.

28 (Previously Presented) The shunt system according to claim 26, wherein the flow restricting component comprises a

single tubular structure having an internal diameter of less than 0.2 mm.

29 (Previously Presented) The shunt system according to claim 26, wherein the length of the at least one tubular structure is in the range of from about 3.0 mm to about 90 mm.

30 (Original) The shunt system according to claim 29, wherein the total length of the at least one tubular structure is divided in two or more individual segments.

31 (Previously Presented) The shunt system according to claim 1 further comprising at least one check valve located within the shunt body for preventing cerebrospinal fluid from flowing back from the sinus catheter to the brain ventricle catheter.

32 (Original) The shunt system according to claim 31, wherein said at least one check valve does not have any inherent resistance or opening pressure and essentially does not exert any resistance on the flow of cerebrospinal fluid through the shunt body.

33 (Previously Presented) The shunt system according to claim 31, wherein the resistance to flow through the shunt body is independent of said at least one check valve and defined solely by the flow resistance of the flow restricting component.

34 (Previously Presented) The shunt system according to claim 31, wherein the operation of said at least one check valve is independent of a predetermined opening pressure to be overcome by the differential pressure defined by the difference between the intracranial pressure and the pressure in the sinus.

35 (Previously Presented) The shunt system according to claim 31, wherein said at least one check valve comprises a ball valve and optionally further comprises valve members selected from the group consisting of guided rigid valve members and flexible valve members, including rigid, ring shaped valve members, and flexible valve members optionally as tongue-shaped laminae.

36 (Previously Presented) The shunt system according to claim 31, wherein said at least one check valve comprises a mitral silicone valve.

37 (Previously Presented) The shunt system according to claim 1, wherein the brain ventricle catheter is connected to a first end location of said shunt body, and wherein said sinus catheter is connected to a second end location of said shunt body.

38 (Previously Presented) The shunt system according to claim 1 further comprising a shunt body (10) made from silicone rubber, an antechamber (11) having opposite flat walls

(12) made from hard silicone rubber, and opposite domed walls (13) made from soft, perforatable, self-healing silicone rubber,

wherein at the proximal end (the top end) the chamber walls end in a tapering end comprising a tip (14), to which a brain ventricle catheter (15) can be connected and secured,

wherein the antechamber (11) is connected to the tubular flow restricting component (16) so that the distal end of the chamber (11) forms an inlet to a tubular flow restricting component (16),

wherein a check valve or non-return valve (17) is arranged both at the entrance to the antechamber (11) and at the outlet of the tubular flow restricting component (16),

wherein fluidic connection to the sinus system of the invividual is provided by a tubular drain (18), and

wherein fluidic connection to a brain ventricle of the invividual is provided by a brain ventricle catheter (15).

Claims 39-47 (Cancelled).

48 (Previously Presented) A method for implanting different catheters of a cerebrospinal fluid shunt system into a brain ventricle and the sinus system, respectively, of an individual, said method comprising the steps of

i) providing a shunt system according to claim 1,

ii) placing the shunt body of the shunt system subcutaneously on top of the calvarium of an individual,

optionally behind the coronal suture on one side of the sagittal suture,

iii) inserting a second end of the brain ventricle catheter in a brain ventricle via a first borehole,

iv) optionally connecting a first end of the brain ventricle catheter to a first location on the shunt body;

v) inserting a second end of the sinus catheter into the sinus system of the individual via a second borehole,

vi) optionally connecting a first end of the sinus catheter to a second location on the shunt body,

wherein the shunt body provides fluidic communication between the brain ventricle catheter and the sinus catheter.

Claims 49-59 (Cancelled).

60 (Previously Presented) A method for shunting cerebrospinal fluid from a brain ventricle to the sinus system of an individual, said method comprising the steps of

i) providing a shunt system according to claim 1,

ii) inserting the first catheter into a brain ventricle of the individual to drain cerebrospinal fluid from the brain ventricle,

iii) inserting the second catheter into the sinus system of the individual to feed the cerebrospinal fluid via the shunt body into the sinus system,

iV) shunting cerebrospinal fluid from a brain ventricle to the sinus system of an individual

wherein the shunt member providing fluidic communication between the first and second catheters,

Claims 61-84 (Cancelled).